

Squirrels are incredible

by Mark Laker



American red squirrel eating white spruce seeds. Credit: Courtney Celley/USFWS.

I recently took a family vacation to my home state of Minnesota to visit family and friends. We arrived in time to help rake up the mountain of leaves from the giant maple trees in my mom's backyard. As my sons enjoyed diving into the leaf piles, I watched red cardinals on one of the bird feeders my brother had put up in the backyard. The feeder was hanging from a ten-foot piece of parachute cord tied to a maple tree branch. There was a large plastic dome right above the feeder. My brother Jim explained it was a "squirrel baffle", designed to repel a squirrel aerial assault.

I commented that the feeder appeared to have a solid seed security system. My brother said, "No, they

can get to it." I thought there was no way, and anxiously waited to see one attempt the robbery. Not long after, the little band of grey marauders arrived. Several squirrels combed through the grass below the feeder searching for fallen seeds, but one took to the tree. Hanging upside down from the branch above the bird feeder, the squirrel appeared to be making plans for the next move. I yelled to my kids, "Come quick! He's going to do it!" The squirrel then leaped and grabbed the parachute cord and slid down to the top of the "squirrel baffle". After a few seconds, probably waiting for his paws to cool down, the squirrel grabbed the cord with its hind feet and stretched out

across the baffle. The weight of the squirrel tilted the baffle so the bottom edge touched the top of the feeder. He then let go of the cord, reached out, and grabbed the feeder while falling past it. My sons and I looked at each other in total amazement. My brother just said, “Yep, I’m going to get a new ‘squirrel proof’ feeder today.” I could not wait to see the next act of this ninja squirrel show.

Later that day while visiting a nature preserve, we saw some American red squirrels with bright white belly patches. These are the same species we have on the Kenai Peninsula. Weighing in at 7 ounces, the red squirrel is about half the size of the grey squirrel. Grey squirrels are endemic to the eastern United States. Though the range of the grey squirrel overlaps the red, grey squirrels prefer deciduous tree nuts to conifer seeds. Grey squirrels are scatter hoarders, hiding food in hundreds of places. If they think another squirrel is watching, they will pretend to cache food. Human observers say it is nearly impossible to tell when they are pretending or really hiding food. Even more impressive, they can remember these hiding places. That takes some smarts! Red squirrels, on the other hand, aggressively defend a territory centered on a primary food cache called a midden.

Though they are omnivorous and eat a variety of foods like mushrooms, insects or bird eggs, red squirrels primarily eat conifer seeds. The seeds from white spruce cones are tiny. One squirrel can eat the seeds from over 100 spruce cones a day. Like eating corn-on-the-cob, it chews the scales off, starting at the base of the cone. As each scale falls away, a seed appears. Red squirrels can cache over 20,000 cones in a month.

Red squirrel territories are about two acres in size, but vary depending on food availability. A sure sign of a red squirrel territory is the large pile of discarded cone scales composing the midden. A midden can be over 5 feet wide and a couple feet tall if located under a favorite feeding tree. The decaying debris of the midden creates a cool, moist environment that keeps the cones closed and fresh for a long time. Around the base of the midden will be entrance holes for the food cache and winter shelter. While in the woods you may

have be startled by the loud chatter of a red squirrel. This is not an alarm call, but a one-way warning to the intruder.

Red squirrels mate in February or March and are in estrus for just one day, and then resume their solitary life. Three to seven baby squirrels, called kits, are born after a 40-day gestation period. The babies are born hairless and nurse for 10-12 weeks. Once weaned, the mother will drive them away. The young must establish a territory before winter to survive. Adults can live to about 10 years.

A common question is whether tree squirrels hibernate. Unlike their relatives the ground squirrels, tree squirrels do not hibernate; they just sleep a lot in the winter.

As for those clever little seed robbers in my mom’s backyard, my brother had arrived with a couple of contraptions to outsmart those little bushy tail bandits. The first was an additional cone baffle placed above the existing one. The second was the “mission impossible” feeder. A spring-loaded sliding frame surrounded the cylindrical seed container. The squirrel’s weight will drop the frame and shield access to the seeds.

It took about one hour before contestant number one appeared. It was amazing to watch him stare at this new puzzle, looking for a weakness. Then, just as before, he jumped and slid down the cord and hung over the first baffle and let go. This time he bounced off the second baffle and missed the feeder. Not easily defeated, he went right back at it, and on his second try somehow was able to grab on to the feeder. The cage around the feeder dropped and sealed off the seed ports. Around and around he went trying to find access to the seeds, but no joy. I was thinking, “Yeah, we outsmarted the squirrel.” I then asked my brother about the second feeder hanging from a twenty-foot cord, and he replied, “They can’t get to that one.” Just then we watched one slide down all twenty feet of cord and jump onto the feeder. Those incredible squirrels!

Mark Laker is an ecologist at the Kenai National Wildlife Refuge. Find more Refuge Notebook articles (1999–present) at https://www.fws.gov/refuge/Kenai/community/refuge_notebook.html.